a2 cncl'd.

and lower surfaces. The electrodes 320 can be single surface electrodes or interdigitated electrodes. An interdigitated electrode configuration allows additional options to vary drive voltage to the electrodes depending on the electrode spacing of a particular design. Suitable materials for the electrodes are conductive polymers, such as polypyrrole or ployaniline, or soft metals, such as gold. The surface of layer 310 that is electroded is maximized. Layer 330 is bonded to the upper electroded layer 310. A suitable bonding material is a chemical adhesive, such as epoxy. It is preferred for layer 330 to be of the same material as layer 310 so that layer 310 can function as either an active or inactive layer depending on whether it is electrically activated. If a different material is used for layer 330, it must be an insulator. The surface area and thickness of the various layers will vary depending upon specific response requirements.--

Please replace the Brief Description of the Drawings paragraph beginning at page 3, line 29 with the following rewritten paragraph:

a3

--A more complete appreciation of the invention and the many of the attendant advantages thereof will be readily attained as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings, wherein:

FIG. 1 illustrates a prior art membrane structure.

FIG. 2 illustrates the present invention, including tension control actuators integrated into the membrane structure.

FIGs. 3A and 3B illustrate the actuator layers.

FIGs. 4A and 4B illustrate the actuator in its rolled state.

FIG. 4C is a cross-sectional view of FIG. 4B illustrating greater detail of the cap attachment.--

REMARKS

Claims 1-30 remain pending in this application. Claims 19-30 are allowed. The Drawings have been objected to.